TRIPLETT

WireMaster HDMI 2

High Definition Cable Tester

Instruction Manual

TRIPLETT
Test Equipment & Tools

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WireMaster HDMI FEATURES

- *Lightweight, Rugged, Simple to use*
- *Test fragile, easily damaged HDMI Patch Cables and In-wall Cables before and after installation*
- *"X-Test" checks for Shorts, Opens, and Miswires in all RGB conductors (most testers only test for Opens)*
- *Tests all HDMI cables with Type A connectors*
- *Verifies conductor used in 1.4 applications*
- *2 Test Modes: Automatically scan and test all conductors in a cable, or Manually test individual conductors for intermittent faults*
- *Separate Transmitter and Receiver units provided for ultimate versatility, especially when cable ends are in different rooms*
- *Uses 1 standard 9V battery*
- *Low Battery Indicator LED*
- *Padded, Cordura Carrying Case included*
- *One Year Warranty*

INTRODUCTION

The Triplett WireMaster HDMI 2 High Definition Cable Tester is an advanced tester utilizing X-TEST technology. It outperforms similar products, identifying faults that other testers miss. Special circuitry tests cables for new conductors in v1.4 cables typically used to support Ethernet, 3D, Audio Return Channel, and 4K.

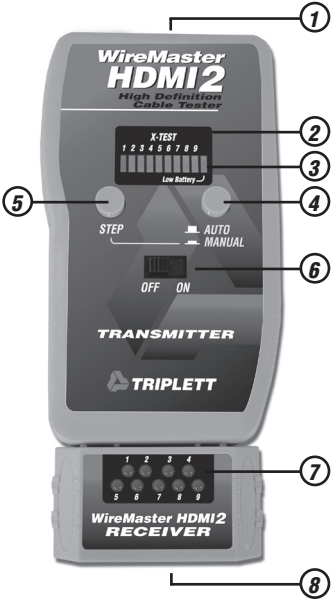
The WireMaster HDMI 2 employs both Autoscanning for quick testing of all of the wires, and Manual testing for more rigorous testing on individual wires. It works with all types of HDMI cables with Type A connectors on their ends. It will test short patch cables or long installed cables. Consisting of a Transmitter and a Receiver, the cable is easily tested by connecting to the ends of the cable and observing the LED displays. A built in battery test informs the user when the 9 volt battery needs to be replaced.

HDMI Cables

Unlike other cables common in the work or household environment (coax, telephone, security, LAN, etc), HDMI cables are very fragile and can be damaged by pulling on them too hard, pulling

them around corners, bending them too sharply, or just rough handling. To meet the requirements of the High Definition Multimedia Interface, some of the wires inside of the cable are very small and easy to damage. Care must be taken during installation to guarantee maximum performance of the cables. The WireMaster HDMI aids the installer by verifying that the cables are good, both before and after the installation.

WireMaster HDMI Panel Layout



1) *HDMI Connector (Transmitter)*
2) *X-Test Display*
3) *Low Battery Indicator*
4) *AUTO / MANUAL Pushbutton*
5) *STEP Pushbutton*
6) *ON/OFF Switch*
7) *X-Test Display (Receiver)*
8) *HDMI Connector*

Installing Battery

Remove the Receiver from the bottom of the Transmitter by sliding it downwards (towards the back of the Transmitter). With Receiver removed, remove the Transmitter battery cover by sliding it open. Install a 9 volt alkaline battery taking care to position the lead wires so the battery fits properly in the cavity. Replace the battery cover.

Using the WireMaster HDMI

Making Connections

Connect one end of the HDMI cable to be tested to the Transmitter and the other end of the cable to the Receiver. The Receiver may be removed from the Transmitter so it may be used remotely if the ends of the cable can't be positioned next to each other. If testing a patch cable, the Receiver may be left connected to the Transmitter.

Autoscanning

Set the WireMaster HDMI 2 AUTO/MANUAL button to AUTO. Set the ON/OFF slide switch to ON while observing the X-Test display. If the Low Battery indicator is lit, replace the battery before continuing. The red X-Test LEDs must slowly sequence from left to right, from 1 to 9, and then reset to 1 and sequence again to 9. This cycle should repeat until the product is turned OFF. When first turned ON, several LEDs may light and the sequence may not begin at 1, but after 9 lights, the product will reset and start the sequence at 1. Observe the LEDs on the Receiver. They must sequence from 1 to 9, in unison with the Transmitter LEDs. If any LED fails to light in the 1 to 9 sequence, if any more than 1 LED lights at a time, or if the LEDs light out of sequence, the cable is defective. If LED 9 lights up Green, the pin 14 wire required for 1.4 support is present. If LED 9 lights up Red, the pin 14 wire is missing and the cable will not support all 1.4 features

Note: Many 1.3 cables have the pin 14 wire, but they are not properly constructed to support Ethernet, 3D, ARC, and 4K.

Manual Testing

Manual Testing can be helpful in finding an intermittent cable. Set the AUTO/MANUAL button to MANUAL. Set the ON/OFF slide switch to ON while observing the X-Test display. If the Low Battery indicator is lit, replace the battery before continuing. When in the MANUAL mode, the Transmitter will not automatically scan the cable. The user must select the wires to be scanned by pressing the STEP button. Each time the button is pressed, the WireMaster HDMI selects the next wire to be tested. If an intermittent condition is suspected, use the STEP button to select the wire to be tested on the Transmitter by observing the numbered LED on the Transmitter. The same numbered LED must light on the Receiver. While observing the LED on the Receiver, gently flex the HDMI cable. The LED must remain lit. If the LED goes off or additional LEDs light, the cable is defective. For complete testing, try the 'flex test' on each wire in the HDMI cable.

Non-Standard Cables

Some HDMI cables are constructed using methods that do not meet the standards established by the HDMI Licensing organization. While they may work OK when connected to electronic equipment, their non-standard construction may cause them to fail some of the tests performed by the WireMaster HDMI 2.

X-TEST LED	HDMI Cable Wire / Pin	HDMI Signal Description
1	1	Red Data Plus (Data 2 +)
	2	Red Data Shield (Data 2 Shield)
	3	Red Data Minus (Data 2 –)
2	4	Green Data Plus (Data 1 +)
	5	Green Data Shield (Data 1 Shield)
	6	Green Data Minus (Data 1 –)
3	7	Blue Data Plus (Data 0+)
	8	Blue Data Shield (Data 0 Shield)
	9	Blue Data Minus (Data 0 –)
4	10	CLK, Clock Plus (Clock +)
	11	CLK, Clock Shield
	12	CLK, Clock Minus (Clock –)
5	13	CEC, Consumer Electronic Control
	17	DDC, CEC Ground, Display Data Channel
6	15	SCL, Serial Clock (I2C)
7	16	SDA, Serial Data (I2C)
8	18	+ 5V Power
9	14	Ethernet, 3D, 4K, Audio Return Channel
	19	HPD, Hot Plug Detect

Product Specifications

Cables Tested:	*HDMI cables with Type A connectors conforming to 1.0, 1.1, 1.2, 1.2a, 1.3, 1.3a, 1.3b, 1.3c, 1.4, 1.4a Category 1 and Category 2 cables*
Tests Performed:	*Tests for Opens, Shorts, Miswires*
Test Modes:	*Auto or Manual*
Displays	
Transmitter:	*9 Red LEDs indicate test performed*
Receiver:	*8 Green LEDs, 1 Red / Green LED, indicates test results*
Battery:	*Standard 9v Alkaline Battery, ANSI 1604A, IEC 6LR61*
Size (approx):	*Transmitter: 2.8" x 4.8" x 1.1" Receiver: 2.3" x 1.2" x 1.1" Combined: 2.8" x 5.9" x 1.1"*
Weight (approx):	*Transmitter: 0.305 lb Receiver: 0.050 lb Combined: 0.355 lb*

Maintenance

*No regular maintenance of the **WireMaster HDMI** is required. In the event the product is defective or is damaged, please contact Triplett for repair information.*

TRIPLETT PRODUCT RETURN INSTRUCTIONS

In the unlikely event that you must return your Triplett equipment for repair, the following steps must be taken.

1) ***Call 1-800-TRIPLETT to obtain a Return Material Authorization (RMA) number from Customer Service.***

2) ***Enclose a copy of the original sales receipt showing date of purchase.***

3) ***Clearly print the RMA number on the outside of the shipping container.***

4) ***Return to:*** ***Triplett
850 Perimeter Road
Manchester, NH 03103
ATTN: Repair Dept.***

Triplett One Year Limited Warranty

Triplett warrants instruments and test equipment manufactured by it to be free from defective material or workmanship and agrees to repair or replace such products which, under normal use and service, disclose the defect to be the fault of our manufacturing, with no charge within one years of the date of original purchase for parts and labor. If we are undable to repair or replace the product, we will make a refund of the pruchase price. Consult the Instruction Manual for instructions regarding the proper use and servicing of instruments and test equipment. Our obligation under this warranty is limited to reparing, replacing, or making refund on any instrument or test equipment which proves to be defective within one year from the date of original purchase.

This warranty does not apply to any of our products which have been repaired or altered by unauthorized persons in any way so as, in our sole judgment, to injure their stability or reliability, or which have been subject to misuse, abuse, misapplication, negligence, accident or which have had the serial numbers altered, defaced, or removed. Accessories, including batteries and fuses, not of our manufature used with this product are not covered by this warranty.

To register a claim under the provisions of the warranty, contact Triplett's Customer Service Department for a Return Authorization Number (RMA) and return instructions. No returned product will be accepted without an RMA number. Upon our inspection of the product, we will advise you as to the disposition of your claim.

ALL WARRANTIES IMPLIED BY LAW HEREBY LIMITED TO A PERIOD OF ONE YEAR FROM DATE OF PURCHASE, AND THE PROVISIONS OF THE WARRANTY ARE EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES EXPRESSED OR IMPLIED.

The purchaser agrees to assume all liability for any damages and bodily injury which many result from the use or misuse of the product by the pruchaser, his emplyees, or others, and the remedies provided for in this warranty are expressly in lieu of any other liability Triplett may have, including incidental or consequential damages.

Some states (USA ONLY) do not allow the exclusion or limitations of incidental or consequential damages, so the above limitation or exclusion may not apply to you. No representative of Triplett Instruments or any other person is authorized to extend the liability of Triplett in connections with the sale of its products beyond the terms hereof.

Triplett reserves the right to discontinue models at any time, or change specifications, price or design, without notice and without incurring any obligation.

This warranty gives you specific legal rights, and you may have other rights which very from state to state.

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